

TOP SECRET**PRIORITY**

1 OCT 69 19 29Z

P 011847Z
FM NPICOUT-68486^{25X1}AFSSO PACAF
AFSSO ACIC
AFSSO FTD
AFSSO USAFE
CNO
OPCEN
FICENR

ZEM

TOP SECRET TTTT

CITE NPIC 7126.

25X1

25X1

25X1

ALSO FOR 544 ARTW.

SUBJECT: CAMERA INFORMATION FOR MISSION 1052-1

1. THE MISSION UTILIZED TWO PAN CAMERAS, FOUR HORIZON CAMERAS,
A STELLAR CAMERA, AND AN INDEX CAMERA.

2. CAMERA DATA

A. MAIN UNITS	FORWARD	AFT	STAR HOR	PORT HOR
FOCAL LENGTHS (MM)	609.602	609.628	FWD 55.000 AFT 54.900	FWD 55.000 AFT 55.000
FILTER (WRATTEN)	23A	21	25	25
APERTURE	F 3.5	F 3.5	NA	NA
SLIT WIDTH (IN)	.225	.170	NA	NA
EXPOSURE (SEC)	1/100	1/100	NA	NA
FILM	3404	3404	3404	3404
RESOLUTION (L/MM)	194	189	NA	NA
CAMERA NUMBER	216	217		

B. S/I UNITS

	PART 1	PART 2	STELLAR	INDEX
FOCAL LENGTH (MM)			84.0730	38.4572
			84.0176	38.3052
FILTER (WRATTEN)			NONE	21
APERTURE			F 1.8	F 4.5
EXPOSURE (SEC)			2.0	1/500
FILM			3401	3400
RESOLUTION (L/MM)			NA	73
			NA	75
UNIT NUMBER			D111/138/137	
			D110/140/140	

3. LENS DISTORTION (PIN CUSHION) MM

A. MAIN UNITS	3	2	1	0	359	358	357
FWD UNIT	.001	0	0	0	0	0	.002
AFT UNIT	.001	0	0	0	0	0	.002

B. HORIZON CAMERA (MM)

	PORT	STAR	PORT	STAR
(RADIAL) 10 DEGREES	.010	.010	.020	.010
20 DEGREES	.020	.040	.030	.030
(TANGENTIAL) MAX VECTOR	.010	.030	.030	.150

4. CAMERA ANGLES

	DEG.	MIN.
A. ANGLE BETWEEN PAN CAMERAS	29	43.23
B. DEPRESSION ANGLE BETWEEN HORIZON AND PAN CAMERAS	FWD STAR 14	24.7
	FWD PORT 14	57.4
	AFT STAR 15	11.6
	AFT PORT 14	44.7
C. ANGLE BETWEEN STELLAR AND INDEX CAMERAS	PART 1 89	56.9
	PART 2 90	01.3

5. TIMING MARKS

FREQUENCY MARKS WILL APPEAR ON THE FILM AT A RATE OF 200 CYCLES

DISTRIBUTION		
CY	OFFICE	PI
6	FILE	
	CABLE SEC.	1
	PP&B/RD	
	SECUR.	
	TSSG	
3, 4	7SSG/ADSD	
	PSG/OC	
5	RKD	✓
	REPRO	
	AID	
	IBG	
	PROD	
	SCIEN	
	WEST	
	EAST	
	M&S	
	PGM	
	IAS	
	DIA-XX4	
	SPAD	
	DIA-AP	
	CMX	25X1

25X1

TOP SECRETGROUP 1
Excluded from automatic
downgrading and
declassification

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PER SECOND.

6. IMAGE MOTION COMPENSATION DATA (CYCLE RATE (CPS), GROUND ANGULAR
REF. LEVEL AMPL LEVEL PASSES

NO VELOCITY (GAV), AND PASSES WHERE USED).

NO	CPS	GAV	NO	CPS	GAV	PASSES
1	.3994	.0361	1	.1304	.0118	10
1	.2994	.0361	5	.0860	.0078	5D THRU 10D
1	.2994	.0361	11	.0001	.0000	38D, 69D, 85D
4	.3690	.0334	2	.1205	.0109	17D THRU 27D
4	.3690	.0334	1	.1305	.0118	29D, 37D, 39D THRU 54D
3	.3796	.0343	1	.1304	.0118	55D, 56D
3	.3796	.0343	8	.0450	.0041	58D
4	.3690	.0334	5	.0860	.0078	72D THRU 82D
4	.3690	.0334	4	.0989	.0089	86D THRU 104D

7. PROGRAM TIME DATA

PASS	CAMERA ON TIME (ZULU TIME)				PROGRAM ON TIME UP RAMP		PROGRAM DURATION
	DAY	HR	MIN	SEC	SEC	SEC	
1D	22	22	36	24	1394	39	
5D1	23	04	33	51	1246	51	
5D2	23	04	36	26	1401	102	
6D	23	06	10	16	1708	50	
7D	23	07	26	24	956	110	
8D	23	09	00	11	1263	90	
9D	23	10	34	02	1574	59	
10D1	23	11	57	36	1268	168	
10D2	23	12	03	38	1630	149	
10D3	23	12	14	21	2273	46	
11D	23	22	14	36	1297	124	
21D	24	04	14	27	1604	108	
22D	24	05	50	02	2012	141	
23D1	24	07	10	38	1521	69	
23D2	24	07	14	39	1762	44	
24D1	24	08	39	52	1546	132	
24D2	24	08	42	53	1727	31	
24D3	24	08	44	55	1849	42	
25D	24	10	09	02	1569	102	
26D	24	11	39	12	1653	48	
27D	24	13	14	35	2049	48	
29D	24	16	21	16	2597	46	
37D	25	03	55	38	1571	132	
38D1	25	05	19	57	1305	129	
38D2	25	05	30	33	1941	152	
39D1	25	06	51	42	1744	67	
39D2	25	06	56	03	2005	45	
40D	25	08	19	40	1438	207	
42D	25	11	18	53	1547	163	
47D	25	18	47	47	1869	120	
48D	25	20	15	05	1785	45	
54D	26	05	10	46	2022	114	
55D1	26	06	31	12	1528	87	
55D2	26	06	36	05	1821	53	
56D	26	07	59	21	1495	305	
58D	26	10	59	29	1483	224	
69D	27	03	17	59	1606	26	
72D1	27	07	40	34	1384	332	
72D2	27	07	46	39	1750	95	
73D1	27	09	08	52	1355	176	

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73D2	27	09	16	31	1814	180
74D	27	10	40	57	1555	226
82D	27	22	30	53	1517	26
85D	28	02	58	10	1580	94
86D1	28	04	27	35	1623	30
86D2	28	04	29	07	1715	58
88D1	28	07	20	39	1361	100
88D2	28	07	24	01	1564	302
89D1	28	08	49	30	1369	181
89D2	28	08	56	00	1758	114
90D1	28	10	22	25	1624	98
90D2	28	10	27	36	1935	153
102D	29	04	07	59	1654	166
103D1	29	05	40	01	1848	36
103D2	29	05	43	51	2078	47
104D	29	07	02	02	1439	620

NOTE: ABOVE DATA APPLIES TO FWD UNIT ONLY. ADD 12 SECONDS TO
OBTAIN START TIMES OF AFT UNIT.

8. TIME CORRELATION (MILLISECONDS)

PASS	CLOCK TIME	SYSTEM TIME	DIFFERENCE
0	73532.521	53045.6440	----
1	101844.043	81357.1698	.004
8	137883.608	30996.7393	.005
16	182111.642	75224.7785	.005
25	228408.391	35121.5325	.005
32	267326.601	74041.7463	.004
41	313664.346	33977.4954	.004
48	352556.017	72869.1695	.003
57	398859.818	32772.9737	.003
64	437869.018	71782.1761	.002
73	484234.590	31747.7504	.002
81	528426.632	75929.7943	.002
89	32540.400	30524.4755	.002
97	76801.438	74785.5146	.001
105	117831.821	29415.8981	.001

NOTE: ALL "DIFFERENCE" VALUES ARE MINUS.
GP-1

TOP SECRET

END OF MESSAGE

((NOTE: ABOVE MESSAGE ALSO PASSED

25X1